


```

A:Reference number: S09232; MUID:90245669
A:Accession: S09232
A:Molecule type: mRNA
A:Residues: 1-58, 'L', '60-62, 'Q', '64-141 <ANG>
A:Cross-references: EMBL:X52486; NID:g1319; PIDs:CAA36729.1; PID:g1320
R:Lin, W.K.; Nahm, H.S.; Sweeney, C.M.; Holcomb, G.N.; Ward, D.N.
J. Biol. Chem. 247, 4365-4381, 1972
A:Title: The primary structure of ovine luteinizing hormone. II. The amino acid sequence
A:Reference number: A92110; MUID:72211145
A:Accession: A92110
A:Molecule type: protein
A:Residues: 21-121, 'PG', '124-125, 'E', '127-139 <LID>
R:Saltram, M.R.; Samy, T.S.A.; Papkoff, H.; Li, C.H.
Arch. Biochem. Biophys. 153, 572-586, 1972
A:Title: The primary structure of ovine interstitial cell-stimulating hormone. II. The b
A:Reference number: A90053; MUID:73190035
A:Accession: A90053
A:Molecule type: protein
A:Residues: 21-29, 'E', '31-71, 'P', '72-80, 'Q', '82-121, 'PG', '124-125, 'E', '127-139 <SAI>
R:Nomura, K.; Tsunashima, S.; Ohmura, K.; Sakiyama, F.; Shizume, K.
Endocrinology 123, 700-712, 1988
A:Title: Renotropic activity in ovine luteinizing hormone isoform(s) .
A:Reference number: A61098; MUID:88283534
A:Accession: B61098
A:Molecule type: protein
A:Residues: 21-39, 'N', '41-49, '64-78, 'V', '80-82, '84-106, '115-121, 'PG', '124-138 <NOM>
A:Note: this form was designated form beta-3; forms beta-1 and beta-2 each lack several
C:Genetics:
A:Introns: 5/3: 61/3
C:Superfamily: pituitary glycoprotein hormone beta chain
C:Keywords: blocked amino end; glycoprotein; hormone; pituitary
F:1-20/Domains: signal sequence #status predicted <SIG>
F:21-141/Product: lutropin beta chain #status experimental <MAT>
F:21/Modified site: blocked amino end (Ser) (in mature form) (partial) (probably acetylate
F:29-54, 43-77, 46-108, 58-130, 92-120, 110-113/Disulfide bonds: #status predicted
F:33/Binding site: carbohydrate (Asn) (covalent) #status experimental

Query Match 28.3%; Score 204.5; DB 1; Length 141;
Best Local Similarity 39.2%; Pred. No. 5.4e-13;
Matches 47; Conservative 19; Mismatches 45; Indels 9; Gaps 5;

Oy 11 MALLLLAGYGVLAGSSGNLRFVGCNAVREFFLAKKRCGR-GLRITTDACGRCETMEK 69
Db 7 LLLMLLVAGV-WMSKRPLRL--COPINATLAEKACPCVCIFFTYSICAGYPSMKR 63

Oy 70 --PILEPPYIEAHNVGCVYNETKQVTKLPLNCAPGVDPFYPAVIRDCGACSTATREC 127
Db 64 VLPVILPPAPQ---RVCTYHELRFASVRLPGCPPEVDPWVSFPVALSCHGECRLSTDC 120

RESULT 6
A48166
gonadotropin II beta chain precursor - European eel
C:Species: Anguilla anguilla (European eel)
C:Date: 31-Dec-1993 #sequence_revision 31-Dec-1993 #text_change 16-Jul-1999
C:Accession: A48166; I49982
R:Querau, B.; Mounmi, M.; Jutisz, M.; Fontaine, Y.A.; Counils, R.
J. Mol. Endocrinol. 4, 257-264, 1990
A:Title: Molecular cloning and sequence analysis of the cDNA for the putative beta subu
A:Reference number: A48166; MUID:90334705
A:Accession: A48166
A:Status: preliminary; not compared with conceptual translation
A:Molecule type: mRNA
A:Residues: 1-140 <ODE>
A:Cross-references: EMBL:X61039; NID:962395; PIDs:CAA43374.1; PID:g62396
C:Superfamily: pituitary glycoprotein hormone beta chain

Query Match 27.9%; Score 201.5; DB 2; Length 140;
Best Local Similarity 38.9%; Pred. No. 1.1e-12;
Matches 42; Conservative 16; Mismatches 47; Indels 3; Gaps 3;

Oy 21 CVLGASGNLRTFVGCNAVREFFLAKKPGC-RGLRITTDACGRCETMEKPILEPPYTEA 79

```

```
DB      16 CHLLVSAGG-SILLCEPRLNETISVENKDGCCPKCLVFGFNSICSGHCT-KDPSYNSPLSTV 73
QY      80 HHRVCTYNETKQTVFKLPNCAGVDPEFYTPVAIRCDGACSTATTEC 127
       : ||||| : ||:||| ||||| ||||| ||| | : |||
DB      74 YGRVCTYRDVRVEYTRFLPDRCRGVDPNHTFEVALSCDCMLCTMDRSDC 121

RESULT 7
C36179
gonadotropin II beta chain precursor - chum salmon
C:Species: Oncorhynchus keta (chum salmon)
C:Date: 10-Sep-1999 #sequence_revision 10-Sep-1999 #text_change 10-Sep-1999
CAccession: C36179; S09344
R:Sekine, S.; Saito, A.; Itoh, H.; Kawachi, H.; Itoh, S.
Proc. Natl. Acad. Sci. U.S.A. 86, 8645-8649, 1989
A>Title: Molecular cloning and sequence analysis of chum salmon gonadotropin cDNAs.
A:Reference number: A36179; MUID:90046849
A:Accession: C36179
A>Status: preliminary
A:Molecule type: mRNA
A:Residues: 1-142 <SEQ>
A:Cross-references: GB:M27154; NID:g213429; PIDN:AAA49409.1; PID:g213430
R:Itoh, H.; Suzuki, K.; Kawachi, H.
Gen. Comp. Endocrinol. 71, 438-451, 1988
A>Title: The complete amino acid sequences of beta-subunits of two distinct chum salm
A:Reference number: S07216; MUID:89053031
A:Accession: S09344
A:Molecule type: protein
A:Residues: 24-72,'I','T'-142 <ITIO>
C:Superfamily: pituitary glycoprotein hormone beta chain
C:Keywords: glycoprotein; heterodimer; hormone; pituitary
F:1-23/Domains: signal sequence #status predicted <SIG>
F:24-142/Product: gonadotropin II beta chain #status experimental <MAT>
F:29-54,43-77,46-108,58-130,92-120,110-113/Disulfide bonds: #status predicted
F:33/Binding site: carbohydrate (Asn) (covalent) #status predicted

Query Match          27.8%; Score 201; DB 1; Length 142;
Best Local Similarity 34.7%; Pred. No. 1,2e-12;
Matches 42; Conservative 19; Mismatches 44; Indels 16; Gaps 3;

QY      22 VIGASSGNLRITGVCAVRE-----FFFLAKRPQC-RGLRTITTDACGCRET 66
       :|| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
DB      1 MGLHAVGTLSLFLCTLLEPVEGSLMQPCOPINQTVSLEKECPCLVIQTPTICSHCVT 60
QY      67 WKPRILEPYIAHHNVCTNYETKQTVFKLPNCAGVDPEFYTPVAIRCDGACSTATTE 126
       :||| : | | | : |||| : |::||| | || | ||||| ||| | : |||
DB      61 KEPVKSPFSIVYQGHVCYRDVRYETIRLRPCPPWVPDRPHYTPVALSCDCSLCMNDSD 119
QY      127 C 127
       |
DB      120 C 120

RESULT 8
gonadotropin II beta subunit - mummichog
C:Species: Fundulus heteroclitus (mummichog)
C:Date: 13-Sep-1996 #sequence_revision 13-Sep-1996 #text_change 16-Jul-1999
CAccession: I50554
R:Llin, Y.W.; Rupnow, B.A.; Price, D.A.; Greenberg, R.M.; Wallace, R.A.
Mol. Cell. Endocrinol. 85, 127-139, 1992
A>Title: Fundulus heteroclitus gonadotroplins. 3. Cloning and sequencing of gonadotropin
A:Reference number: I50553; MUID:92405806
A:Accession: I50554
A>Status: preliminary; translated from GB/EMBL/DBJ
A:Molecule type: mRNA
A:Residues: 1-136 <LIN>
A:Cross-references: GB:M87015; NID:g213251; PIDN:AAB59963.1; PID:g213252
C:Genetics:
C:Gene: GTIIIBeta
C:Superfamily: pituitary glycoprotein hormone beta chain

Query Match          27.6%; Score 199; DB 2; Length 136;
```


THIS PAGE BLANK (USPTO)